Stated Meeting, Oct. 15, 1869.

Present, eleven members.

Prof. CRESSON in the Chair.

A letter from Prof. Newton of Yale College, to the Secretary, in behalf of M. St. Claire Deville, Director of the New Observatory at Paris, requesting exchanges, and announcing the transmission of the Bulletin of the Observatory, was read, and, on motion, the Observatory was ordered to be placed on the list of correspondents to receive the Proceedings.

Letters acknowledging the receipt of Transactions, Vol. XIII., Part 3, and Proceedings No. 81 were received from the Peabody Institute at Baltimore, and the New York Lyceum of Natural History.

Donations for the Library were received from Prof. Zantedeschi, the Essex Institute, the Boston S. N. H., the American Academy of Arts and Sciences, Mr. E. M. Stone, of Providence, the New York Lyceum, the Philadelphia Academy of Natural Sciences and Medical Journal, and the State Department and Coast Survey Bureau at Washington.

The Committee to which was referred the Memoir of Dr. Brinton, entitled the "Arowack Language of Guiana," &c., reported in favor of its publication in the Transactions; and on motion of Mr. Fraley it was so ordered.

Prof. Cresson laid before the Society a profile of the elevations attained by the recent flood in the Schuylkill river, for a distance of 34,200 feet above the dam at Fairmount, and from the dam to Chestnut street Bridge, with a table of

209

heights reached by the floods of previous years. He ascribed the extra elevations, at certain points along the profile section, to the obstruction which a narrowing of the water basin, or a change in its direction, should produce. Instead of the usual difference of 1.8 foot, between the levels of the surface of the water, at the head and at the foot of Fairmount pool, there occurred a difference of 20 feet, at the height of the flood. Oscillations in the flood-level, averaging six minutes in duration, were observed on the shores, and in the forebay, near the dam, the greatest of which was about 18 inches in vertical extent. The maximum velocity of the water was about nine miles an hour where it passed over the dam.

Height of Water	· above.	Water Works Guag	e. City Datum.
1822 Ice flood of	Feb. 21	9.08	13.17 feet.
1839	Jan. 26	10.17	$\dots 14.25$
1840	Feb. 10`	7.0	11.09
1841	Jan. 7	8. 0	12.09
1846	March4	7.1	11.17
1850 Summer	July 19		$\dots 12.09$
1850 Autumn	Sep. 2	10.92	15.01
1857		7.0	11.09
1869	Oct. 4	11.64	$\dots 15.73$

Nominations for membership were read and balloted for.

On motion, the New Bedford Public Library was ordered to be placed on the list of correspondents to receive the Proceedings from the beginning.

The ballot-boxes were then examined by the presiding officer, and the following persons declared duly elected members of the Society :

Miss Maria Mitchell, of Vassar College, N. Y. Mrs. Mary Somerville, of England, now of Naples. Mrs. Elizabeth Agassiz, of Cambridge, Mass. Charles Darwin, of England. George Rawlinson, of England. Louis Gruner, Ecole des Mines, Paris. Carl Vogt, of Geneva. Carl T. E. Von Siebold, of Munich. Carl Fr. Naumann, of Leipsig. Ferdinand Von Hochstetter, of Vienna. George Von Frauenfeld, of Vienna. Philip T. Tyson, of Baltimore. Edward Hopper, of Philadelphia. Charles Bullock, of Philadelphia. Alfred M. Mayer, of South Bethlehem, Pa. George W. Anderson, of West Haverford, Pa. And the Society was adjourned.

Stated Meeting, Nov. 5, 1869.

Present, fifteen members.

MR. FRALEY, Vice-President, in the Chair.

Mr. Edward Hopper was introduced to the presiding officer and took his seat.

Letters accepting membership were received from Miss Maria Mitchell, dated Vassar College, Pokeepsie, Oct. 22d, Mrs. Agassiz, dated Cambridge, Nov. 1, and Prof. Alfred M. Mayer, dated Lehigh University, S. Bethlehem, Oct. 26, 1869.

Letters of Envoi were received from the Academies at Vienna, Göttingen, Stockholm, the Royal Society, and the Manchester Literary and Philosophical Society.

Donations for the Library were received from the Acade